

LESSON
3.5

Practice A

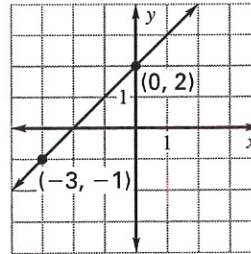
For use with the lesson "Write and Graph Equations of Lines"

Write an equation of the line with the given slope m and y -intercept b .

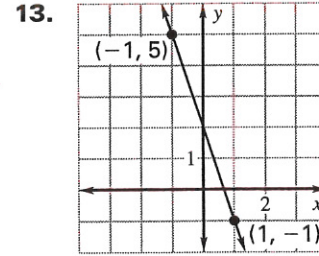
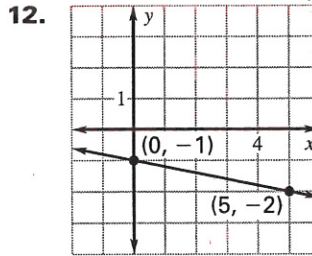
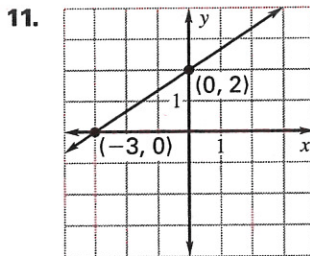
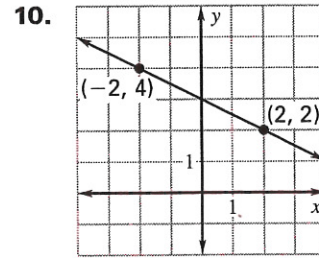
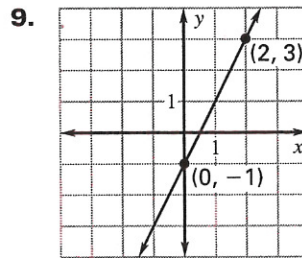
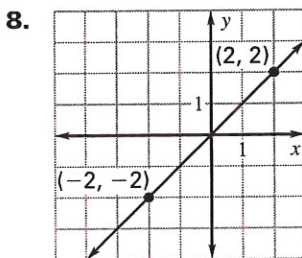
1. $m = 2; b = 3$ 2. $m = 1; b = 1$ 3. $m = 4; b = 2$
 4. $m = 3; b = -2$ 5. $m = -6; b = 4$ 6. $m = \frac{1}{2}; b = -5$

7. **Multiple Choice** Which equation is an equation of the line in the graph?

- A. $y = 2x + 2$ B. $y = x + 2$
 C. $y = -2x + 2$ D. $y = -x + 2$



Write an equation of the line shown.



Write an equation of the line that passes through the given point P and has the given slope m .

14. $P(0, 2); m = 3$ 15. $P(3, 0); m = 2$ 16. $P(2, 4); m = \frac{1}{2}$

Write an equation of the line that passes through point P and is parallel to the line with the given equation.

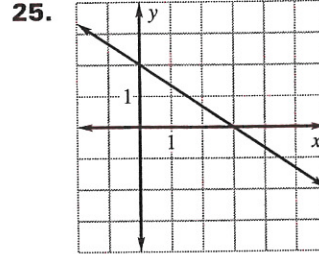
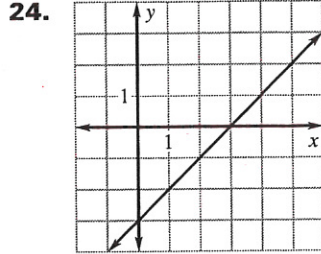
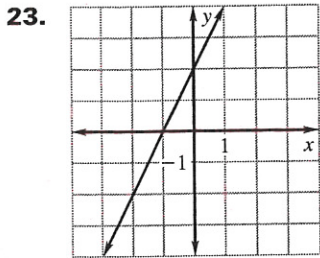
17. $P(1, 3); y = 2x - 2$ 18. $P(2, 5); y = 4x + 1$ 19. $P(0, 1); y = -x + 3$

Write an equation of the line that passes through point P and is perpendicular to the line with the given equation.

20. $P(4, 2); y = \frac{1}{2}x + 4$ 21. $P(3, -2); y = -\frac{1}{3}x - 3$ 22. $P(-2, 6); y = 2$

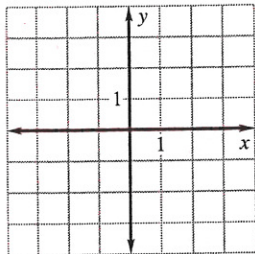
LESSON 3.5 **Practice A** *continued*
 For use with the lesson "Write and Graph Equations of Lines"

Identify the x - and y -intercepts of the line. Use the intercepts to write an equation of the line.

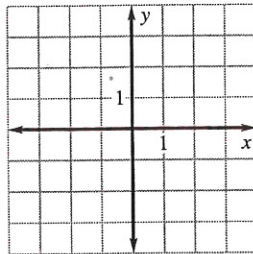


Graph the equation.

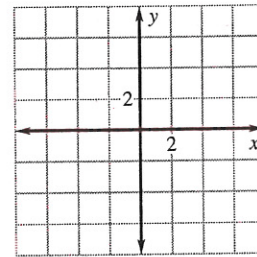
26. $-x + y = 1$



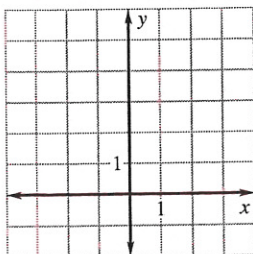
27. $3x + y = 2$



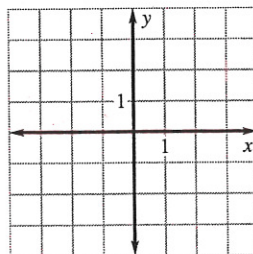
28. $x - 2y = 6$



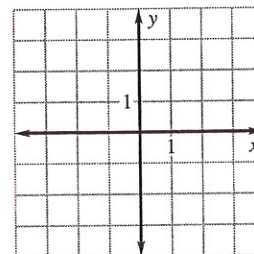
29. $4x + 2y = 8$



30. $y - 4 = x - 1$



31. $2y + 1 = 3x + 5$



32. **Bowling League** The graph models the total cost of participating in a bowling league. Write an equation of the line. *Explain* the meaning of the slope and the y -intercept of the line.

